

REMARKS

Applicant's undersigned representative would like to thank Examiner Tran for the courtesies extended to him during the Interview conducted on June 9, 2003.

At the Interview, the rejections of claims of the instant application on U.S. Patent 6,119,423 to Costantino and Costantino taken in view of U.S. Patent 3,679,531 to Wienand et al, were specifically discussed.

In order to provide a greater line of patentable distinction with these references, an amendment of rejected base claim 21 was proposed by applicant's representative and discussed with the Examiner. Additionally, it was proposed to cancel claims 1-20, inclusive, and claims 26 and 27, to place the claims and application in better condition for allowance or appeal. The present amendment of Claim 21 reflects the changes mentioned above and shows deletions by strike-throughs of the terms "sides", "surfaces" and "edges" to effect consistent terminology throughout this twice-amended claim. Additional changes to the claim made by this Amendment subsequent to the Interview are also included herewith and are underlined for ready reference.

At the aforementioned Interview, the Constantino patent was discussed in detail and Applicant's representative explained that the

substrate 3 of each panel of Constantino is of overall rectangular shape with ends that are squared (Ref: Figures 4A, 4B; 6A, 6B and descriptive specification).

It is only when two panels are joined in tandem as best seen in Figures 4 and 6, that opposite ends of the strips 2 have a staggered appearance. But the underlying substrates are still square and do not have staggered edges. Moreover, to achieve this appearance, the substrate portions of the floor panels variously numbered as 1, 7, 12 and 13 extend longitudinally from beneath the strips 2 so that these substrate portions can be slid under and thereby support the overlying and cantilevered ends of strips 2 of a floor panel adjacent thereto.

Clearly, there is no substrate under those free lengths of strips 2 extending beyond, for example, dashed lines 17 (Figure 6A). Thus, strips 2 are cantilevered from the squared ends of the substrate 3 and not supported thereby.

As discussed, the tongue and groove arrangement of the reference is designed to allow the panels to be slid laterally or edgewise into adjacency to effect interlocking. Interlocking is not affected by applying downward directed forces on the interlocks as called for by the present claims. The reference clearly discloses this aspect of the interlocking structure at Column

5, lines 47-50, and at Column 7, lines 14-18 and by the arrows in Figure 6A. Moreover, the tongue and groove interlock extends only along the opposite longitudinal edges of the panels, there are no end interlocks disclosed. The strips 2 are secured to their underlying substrate 3 by screws and adhesive. The tongue and groove side interlocks only serve to “add additional strength to the floor panel 1” (Column 4, lines 44-46, column 5, first and fourth paragraph).

Although the patentee discloses that the “flooring material may be wood, synthetics, tile, marble, etc.” ...(Column 8, lines 5-9) and further states that “while the principal use of the invention is to install hardwood flooring, other materials such as synthetic flooring, marble, etc. may also be installed using this technique.” (Column 3, lines 60-65), it is clear that the patentee does not disclose or suggest the possibility of using a substantially resilient plastic tile as the flooring material which does not require adhesives or mechanical fasteners to achieve interconnected assemblages with adjacent tiles.

On the contrary, the patentee discloses the possibility of “placing a bead of adhesive or glue along the length of the tongue 5 or along the length of groove 16” (Column 4, lines 48-50) to adhesively join the tongue and groove together. Moreover, Constantino alleges that the same installation

techniques described for wood floors “can be used for other surfaces, such as ceiling and walls.” (Column 3, lines 54-56 and Column 4, third paragraph). Obviously, there is no teaching here that one skilled in the art could rely solely on the interlocks provided by substantially resilient, open-sided male-female elements as a possible “installation technique” that would be suitable for mounting resilient tiles to ceilings or walls.

Nowhere in the Constantino patent is there described the possibility of forming a substantially resilient plastic tile having oppositely staggered ends which can be assembled with similar tiles as a floor covering without the use of adhesives. The present assembly is performed by applying downward force to a first row of edge interlock structures comprised of male-female interlock elements which are formed substantially as inverted images of one another.

Claim 21, as amended, in effect, calls for the interlock structures that comprise the first and second rows of said structures as being respectively oriented at substantially right angles adjacent the staggered ends of the tile, thereby interlocking substantially all of said tile edges of the assembly.

Following comments by the Examiner at the Interview, Claim 21 is hereby additionally amended to recite that the interlock structures of each first row of the open-side, substantially resilient interlock structures face in

opposite respective directions. This orientation permits the tiles to be assembled together on a floor substrate by the application of downward forces to the overlying interlock structures of contiguous tiles. Additionally, the claim requires that the interlock structures of each row facing in upward or downward opposite respective directions are comprised of male projections and adjacent, open-sided female cavities having shapes and being sized substantially as inverted images of one another. To provide a clear antecedent basis for the two relevant directions, Claim 21 has been further amended to recite that it is the top of the tile that faces upwardly and the bottom of the tile that faces downwardly.

The combination of Constantino and Wienand et al used to reject Claim 21 under 35 U.S.C. 103, for reasons set forth by the Examiner in Paragraph 2 of the Office Action of April 30, 2003, was also discussed during the Interview.

For reasons set forth hereinabove, it is applicant's contention that Constantino cannot be modified as suggested by the Examiner on Page 10 of the Office Action without the hindsight benefit of applicant's own disclosure herein. Constantino does not effect interpanel engagements "from the top of the base" as suggested by the Examiner because the substrate 3 and the tongue and groove on the strips 2 are designed to interlock from the side, not

the top, as shown by Figure 6A. The tongue and groove structure of the patent are on opposite respective sides of the strips and do not face upwards and downwards, respectively, to effect mating engagements with adjacent panels by the application of downward forces, as now claimed by Claim 21. Additionally, as mentioned hereinabove, the tongue and groove interlocks of Constantino are not on the staggered end edges; hence reliance upon adhesives is required with the patented assembly in order to maintain the adjoining staggered edges in flush relationship after installation. Obviously, the Wienand et al patent is not concerned about floor tiles or floor tiles with staggered end edges, or with floor tiles having right-angled orientations of interlocks for interconnecting such tiles together, both laterally and longitudinally. Additionally, the patented interlocks are not shaped and sized substantially as inverted images of one another, as called for by Claim 21. Wienand et al has distorted interlocks that create protuberances 10 at junction points, Figure 6, thereof.

For the reasons set forth hereinabove, it is respectfully requested that amended Claim 21 be reconsidered and found to be allowable.

Claims 22-25, depending from Claim 21 further define the nature of the tile as simulating the appearance of a wood floor, which is required because wood is not a significant component of the tile matrix. Thus, as set

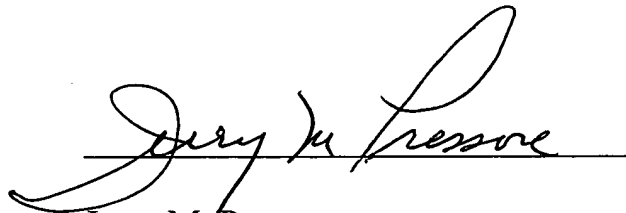
forth in Claim 22, a decorative layer is adhered to the top surface of each tile to simulate a section of wood floor and, as set forth in Claims 23 and 24, each tile has stepped ends to simulate board staggering. Additionally, Claim 25 calls for longitudinal grooves to simulate abutting edges of a wood floor.

The prior art does not disclose or suggest these features, and consequently, it is submitted that Claims 22-25, inclusive, are also allowable.

Allowance of the present application is therefore solicited.

Respectfully submitted,

Applicant's representative,



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